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September 30, 2019

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: Duke Energy Progress, LLC–Monthly Power Plant Performance Report
Docket No. 2006-224-E

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of August 2019.

Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Rebecca J. Dulin

Enclosure

C: Ms. Dawn Hipp, Office of Regulatory Staff
Mr. Jeffrey M. Nelson, Office of Regulatory Staff
Ms. Nanette Edwards, Office of Regulatory Staff
Mr. Ryder Thompson, Office of Regulatory Staff
Mr. Michael Seaman-Huynh, Office of Regulatory Staff
Ms. Heather Shirley Smith, Duke Energy
Mr. Scott Elliott, Elliott & Elliott, P.A.
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC
Mr. Gary Walsh, Walsh Consulting, LLC

Duke Energy Progress
Base Load Power Plant Performance Review Plan

Period: August, 2019

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	None					
	2	None					
Harris	1	None					
Robinson	2	08/11/2019 - 09/01/2019	495.32	Unscheduled	Forced outage due to exciter malfunction	A failure investigation process is underway and has narrowed the cause to either failed armature windings or core delaminations.	The unit was tripped and the damaged exciter is being replaced. The failure investigation process was initiated.

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
August 2019

Lee Energy Complex

No Outages at Baseload Units During the Month.

Mayo Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
1	7/29/2019 7:00:00 AM To 8/2/2019 10:00:00 PM	Sch	8812	Scr Catalyst	Unit outage to lance and vacuum SCR catalyst on both boilers.	

Richmond County Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
7	8/20/2019 9:31:00 PM To 8/21/2019 12:22:00 AM	Unsch	9020	Lightning	Unit tripped due to lightning strike.	
7	8/25/2019 12:26:00 PM To 8/25/2019 3:48:00 PM	Unsch	5049	Other Gas Turbine Fuel System Problems	Tripped on High Haz Gas detected.	
7	8/25/2019 5:16:00 PM To 8/26/2019 4:09:00 AM	Unsch	5049	Other Gas Turbine Fuel System Problems	Secured unit due to high haz gas alarm.	
8	8/25/2019 9:03:00 PM To 8/25/2019 11:44:00 PM	Unsch	5016	Gas Turbine Compressor - Bleed Valves	Compressor bleed valve out of position caused fired shutdown.	
ST4	8/25/2019 8:57:00 PM To 8/26/2019 3:06:00 AM	Unsch	5016	Gas Turbine Compressor - Bleed Valves	Unit was tripped off line due to U8 fired shutdown.	
ST5	8/24/2019 11:40:00 PM To 8/26/2019 10:57:00 AM	Unsch	4293	Turbine Hydraulic System Pipes And Valves	EHC leak on line for main control valve.	

Roxboro Station

No Outages at Baseload Units During the Month.

Sutton Energy Complex

No Outages at Baseload Units During the Month.

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

August 2019
Brunswick Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	938		932	
(B) Period Hours	744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	702,525	100.67	693,517	100.02
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	91	0.01	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-4,744	-0.68	-109	-0.02
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	697,872	100.00%	693,408	100.00%
(K) Equivalent Availability (%)		99.99		100.00
(L) Output Factor (%)		100.67		100.02
(M) Heat Rate (BTU/NkWh)		10,556		10,678

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

August 2019
Harris Nuclear Station

	Unit 1	
(A) MDC (mW)	964	
(B) Period Hours	744	
(C) Net Gen (mWh) and Capacity Factor (%)	710,988	99.13
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	6,228	0.87
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	717,216	100.00%
(K) Equivalent Availability (%)		100.00
(L) Output Factor (%)		99.13
(M) Heat Rate (BTU/NkWh)		10,522

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

August 2019
Robinson Nuclear Station

	Unit 2	
(A) MDC (mW)	741	
(B) Period Hours	744	
(C) Net Gen (mWh) and Capacity Factor (%)	179,951	32.64
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	367,030	66.57
* (G) Net mWh Not Gen due to Partial Forced Outages	4,323	0.79
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	551,304	100.00%
(K) Equivalent Availability (%)		33.42
(L) Output Factor (%)		97.66
(M) Heat Rate (BTU/NkWh)		11,646

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
August 2019

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	744	744	744	744	744
(C) Net Generation (mWh)	124,660	123,545	124,677	270,578	643,460
(D) Capacity Factor (%)	74.47	73.15	73.50	95.96	81.67
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	40,920	42,408	43,152	744	127,224
(H) Scheduled Derates: percent of Period Hrs	24.44	25.11	25.44	0.26	16.15
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	1,820	2,935	1,803	10,654	17,212
(N) Economic Dispatch: percent of Period Hrs	1.09	1.74	1.06	3.78	2.18
(O) Net mWh Possible in Period	167,400	168,888	169,632	281,976	787,896
(P) Equivalent Availability (%)	75.56	74.89	74.56	99.74	83.85
(Q) Output Factor (%)	74.47	73.15	73.50	95.96	81.67
(R) Heat Rate (BTU/NkWh)	8,840	9,011	8,987	5,065	7,314

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
August 2019

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	194	194	182	570
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	104,656	107,566	122,867	335,089
(D) Capacity Factor (%)	72.51	74.52	90.74	79.02
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	29,076	30,394	9,592	69,062
(H) Scheduled Derates: percent of Period Hrs	20.14	21.06	7.08	16.29
(I) Net mWh Not Generated due to Full Forced Outages	3,317	521	1,119	4,957
(J) Forced Outages: percent of Period Hrs	2.30	0.36	0.83	1.17
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	7,287	5,856	1,830	14,972
(N) Economic Dispatch: percent of Period Hrs	5.05	4.06	1.35	3.53
(O) Net mWh Possible in Period	144,336	144,336	135,408	424,080
(P) Equivalent Availability (%)	77.56	78.58	92.09	82.55
(Q) Output Factor (%)	75.09	75.58	92.86	80.94
(R) Heat Rate (BTU/NkWh)	12,033	11,294	0	7,383

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
August 2019

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	119,805	119,515	178,300	417,620
(D) Capacity Factor (%)	74.55	74.37	96.63	82.55
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	31,248	30,504	0	61,752
(H) Scheduled Derates: percent of Period Hrs	19.44	18.98	0.00	12.21
(I) Net mWh Not Generated due to Full Forced Outages	0	0	8,750	8,750
(J) Forced Outages: percent of Period Hrs	0.00	0.00	4.74	1.73
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	9,651	10,685	0	20,336
(N) Economic Dispatch: percent of Period Hrs	6.01	6.65	0.00	4.02
(O) Net mWh Possible in Period	160,704	160,704	184,512	505,920
(P) Equivalent Availability (%)	80.56	81.02	95.26	86.06
(Q) Output Factor (%)	78.02	77.74	101.44	86.45
(R) Heat Rate (BTU/NkWh)	11,844	11,804	0	6,776

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
August 2019

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	125,817	125,758	169,048	420,623
(D) Capacity Factor (%)	75.50	75.46	83.84	78.63
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	40,176	39,432	3,720	83,328
(H) Scheduled Derates: percent of Period Hrs	24.11	23.66	1.85	15.58
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	663	1,466	28,856	30,985
(N) Economic Dispatch: percent of Period Hrs	0.40	0.88	14.31	5.79
(O) Net mWh Possible in Period	166,656	166,656	201,624	534,936
(P) Equivalent Availability (%)	75.89	76.34	98.15	84.42
(Q) Output Factor (%)	75.50	75.46	83.84	78.63
(R) Heat Rate (BTU/NkWh)	11,885	11,890	0	7,110

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
August 2019

	Mayo Station Unit 1
(A) MDC (mW)	746
(B) Period Hrs	744
(C) Net Generation (mWh)	147,355
(D) Net mWh Possible in Period	555,024
(E) Equivalent Availability (%)	91.43
(F) Output Factor (%)	41.49
(G) Capacity Factor (%)	26.55

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
August 2019

	Roxboro Station		
	Unit 2	**Unit 3**	**Unit 4**
(A) MDC (mW)	673	698	711
(B) Period Hrs	744	744	744
(C) Net Generation (mWh)	283,255	258,490	313,680
(D) Net mWh Possible in Period	500,712	519,312	528,984
(E) Equivalent Availability (%)	99.26	99.43	93.10
(F) Output Factor (%)	58.54	49.78	59.30
(G) Capacity Factor (%)	56.57	49.78	59.30

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

September 2018 - August 2019
Brunswick Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	938		932	
(B) Period Hours	8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	7,615,787	92.68	6,770,011	82.92
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	716,056	8.77
* (E) Net mWh Not Gen due to Partial Scheduled Outages	34,928	0.43	96,993	1.19
(F) Net mWh Not Gen due to Full Forced Outages	626,240	7.62	366,339	4.49
* (G) Net mWh Not Gen due to Partial Forced Outages	-60,075	-0.73	214,921	2.63
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	8,216,880	100.00%	8,164,320	100.00%
(K) Equivalent Availability (%)		93.72		85.75
(L) Output Factor (%)		100.33		95.60
(M) Heat Rate (BTU/NkWh)		10,431		10,745

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

September 2018 - August 2019
Harris Nuclear Station

	Unit 1	
(A) MDC (mW)	964	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	8,586,580	102.82
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	732	0.01
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-236,400	-2.83
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	8,350,912	100.00%
(K) Equivalent Availability (%)		99.99
(L) Output Factor (%)		102.82
(M) Heat Rate (BTU/NkWh)		10,252

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

September 2018 - August 2019
Robinson Nuclear Station

Unit 2

(A) MDC (mW)	**741**	
(B) Period Hours	**8760**	
(C) Net Gen (mWh) and Capacity Factor (%)	**5,098,372**	**78.54**
(D) Net mWh Not Gen due to Full Schedule Outages	**1,167,520**	**17.99**
*** (E) Net mWh Not Gen due to Partial Scheduled Outages**	**87,300**	**1.34**
(F) Net mWh Not Gen due to Full Forced Outages	**367,030**	**5.65**
*** (G) Net mWh Not Gen due to Partial Forced Outages**	**-229,062**	**-3.52**
*** (H) Net mWh Not Gen due to Economic Dispatch**	**0**	**0.00**
*** (I) Core Conservation**	**0**	**0.00**
(J) Net mWh Possible in Period	**6,491,160**	**100.00%**
(K) Equivalent Availability (%)		**75.15**
(L) Output Factor (%)		**102.86**
(M) Heat Rate (BTU/NkWh)		**10,332**

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September, 2018 through August, 2019

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,403,352	1,395,178	1,414,479	2,813,985	7,026,994
(D) Capacity Factor (%)	71.20	70.16	70.82	84.76	75.75
(E) Net mWh Not Generated due to Full Scheduled Outages	111,997	126,753	133,053	201,382	573,185
(F) Scheduled Outages: percent of Period Hrs	5.68	6.37	6.66	6.07	6.18
(G) Net mWh Not Generated due to Partial Scheduled Outages	254,999	262,903	266,903	37,625	822,430
(H) Scheduled Derates: percent of Period Hrs	12.94	13.22	13.36	1.13	8.87
(I) Net mWh Not Generated due to Full Forced Outages	37,249	40,516	39,653	67,923	185,341
(J) Forced Outages: percent of Period Hrs	1.89	2.04	1.99	2.05	2.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	3,860	3,860
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.12	0.04
(M) Net mWh Not Generated due to Economic Dispatch	163,403	163,170	143,192	195,266	665,031
(N) Economic Dispatch: percent of Period Hrs	8.29	8.21	7.17	5.88	7.17
(O) Net mWh Possible in Period	1,971,000	1,988,520	1,997,280	3,320,040	9,276,840
(P) Equivalent Availability (%)	79.49	78.37	77.99	90.64	82.92
(Q) Output Factor (%)	78.45	76.81	77.63	92.39	82.93
(R) Heat Rate (BTU/NkWh)	9,007	9,121	9,047	4,570	7,261

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September, 2018 through August, 2019

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	192	192	180	564
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,234,838	1,233,645	1,392,284	3,860,767
(D) Capacity Factor (%)	73.29	73.22	88.47	78.10
(E) Net mWh Not Generated due to Full Scheduled Outages	103,816	93,362	60,727	257,904
(F) Scheduled Outages: percent of Period Hrs	6.16	5.54	3.86	5.22
(G) Net mWh Not Generated due to Partial Scheduled Outages	190,967	196,010	82,507	469,483
(H) Scheduled Derates: percent of Period Hrs	11.33	11.63	5.24	9.50
(I) Net mWh Not Generated due to Full Forced Outages	18,895	22,969	6,133	47,997
(J) Forced Outages: percent of Period Hrs	1.12	1.36	0.39	0.97
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	12,850	12,850
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.82	0.26
(M) Net mWh Not Generated due to Economic Dispatch	136,280	138,810	19,315	294,405
(N) Economic Dispatch: percent of Period Hrs	8.09	8.24	1.23	5.96
(O) Net mWh Possible in Period	1,684,795	1,684,795	1,573,817	4,943,407
(P) Equivalent Availability (%)	81.42	81.49	89.73	84.05
(Q) Output Factor (%)	79.52	79.54	92.94	83.90
(R) Heat Rate (BTU/NkWh)	11,423	11,192	0	7,230

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September, 2018 through August, 2019

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,243,782	1,248,221	1,636,728	4,128,731
(D) Capacity Factor (%)	65.73	65.97	75.34	69.31
(E) Net mWh Not Generated due to Full Scheduled Outages	325,051	342,004	423,113	1,090,168
(F) Scheduled Outages: percent of Period Hrs	17.18	18.07	19.48	18.30
(G) Net mWh Not Generated due to Partial Scheduled Outages	175,607	168,381	0	343,988
(H) Scheduled Derates: percent of Period Hrs	9.28	8.90	0.00	5.77
(I) Net mWh Not Generated due to Full Forced Outages	0	1,001	13,037	14,037
(J) Forced Outages: percent of Period Hrs	0.00	0.05	0.60	0.24
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,144	1,144
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.05	0.02
(M) Net mWh Not Generated due to Economic Dispatch	147,720	132,553	98,459	378,732
(N) Economic Dispatch: percent of Period Hrs	7.81	7.01	4.53	6.36
(O) Net mWh Possible in Period	1,892,160	1,892,160	2,172,480	5,956,800
(P) Equivalent Availability (%)	73.54	72.97	79.87	75.67
(Q) Output Factor (%)	82.63	83.02	95.38	87.39
(R) Heat Rate (BTU/NkWh)	11,376	11,279	0	6,837

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
September, 2018 through August, 2019

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,218,877	1,193,403	1,326,682	3,738,962
(D) Capacity Factor (%)	62.12	60.82	55.88	59.36
(E) Net mWh Not Generated due to Full Scheduled Outages	110,193	153,485	101,458	365,136
(F) Scheduled Outages: percent of Period Hrs	5.62	7.82	4.27	5.80
(G) Net mWh Not Generated due to Partial Scheduled Outages	241,274	224,630	20,013	485,917
(H) Scheduled Derates: percent of Period Hrs	12.30	11.45	0.84	7.71
(I) Net mWh Not Generated due to Full Forced Outages	135,688	182,687	569,475	887,850
(J) Forced Outages: percent of Period Hrs	6.91	9.31	23.99	14.10
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	13,685	13,685
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.58	0.22
(M) Net mWh Not Generated due to Economic Dispatch	256,208	208,035	342,647	806,890
(N) Economic Dispatch: percent of Period Hrs	13.06	10.60	14.43	12.81
(O) Net mWh Possible in Period	1,962,240	1,962,240	2,373,960	6,298,440
(P) Equivalent Availability (%)	75.17	71.42	70.32	72.17
(Q) Output Factor (%)	77.41	77.80	78.18	77.81
(R) Heat Rate (BTU/NkWh)	11,406	11,409	0	7,360

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Baseload Power Plant
Performance Review Plan
September, 2018 through August, 2019

Pre-commercial Generation
Asheville Combined Cycle

		Unit 5
(A)	**MDC (mW)**	
(B)	**Period Hrs**	
(C)	**Net Generation (mWh)**	14,438
(D)	**Capacity Factor (%)**	
(E)	**Net mWh Not Generated due to Full Scheduled Outages**	
(F)	**Scheduled Outages: percent of Period Hrs**	
(G)	**Net mWh Not Generated due to Partial Scheduled Outages**	
(H)	**Scheduled Derates: percent of Period Hrs**	
(I)	**Net mWh Not Generated due to Full Forced Outages**	
(J)	**Forced Outages: percent of Period Hrs**	
(K)	**Net mWh Not Generated due to Partial Forced Outages**	
(L)	**Forced Derates: percent of Period Hrs**	
(M)	**Net mWh Not Generated due to Economic Dispatch**	
(N)	**Economic Dispatch: percent of Period Hrs**	
(O)	**Net mWh Possible in Period**	
(P)	**Equivalent Availability (%)**	
(Q)	**Output Factor (%)**	
(R)	**Heat Rate (BTU/NkWh)**	

Note: The Power Plant Performance Data reports are limited to capturing data beginning the first full month a station is in commercial operation. During the months specified above, Asheville CC produced pre-commercial generation.

Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
September, 2018 through August, 2019

Mayo Station

Units	Unit 1
(A) MDC (mW)	746
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,265,301
(D) Net mWh Possible in Period	6,534,960
(E) Equivalent Availability (%)	66.78
(F) Output Factor (%)	44.48
(G) Capacity Factor (%)	19.36

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
September, 2018 through August, 2019

Roxboro Station

Units	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	1,468,363	1,576,441	2,350,290
(D) Net mWh Possible in Period	5,895,480	6,114,480	6,228,360
(E) Equivalent Availability (%)	77.99	59.41	72.91
(F) Output Factor (%)	56.83	57.97	62.08
(G) Capacity Factor (%)	24.91	25.78	37.74

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
August, 2019

Unit Name	Capacity Rating (mW)	Full Outage Hours		
		Scheduled	Unscheduled	Total
Brunswick 1	**938**	**0.00**	**0.00**	**0.00**
Brunswick 2	**932**	**0.00**	**0.00**	**0.00**
Harris 1	**964**	**0.00**	**0.00**	**0.00**
Robinson 2	**741**	**0.00**	**495.32**	**495.32**

Duke Energy Progress
Outages for 100 mW or Larger Units
August 2019

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	0.00	0.00	0.00
Asheville Steam 2	192	0.00	0.00	0.00
Asheville CT 3	185	0.00	9.25	9.25
Asheville CT 4	185	0.00	0.00	0.00
Darlington CT 12	133	0.00	0.00	0.00
Darlington CT 13	133	258.00	0.00	258.00
Lee Energy Complex CC 1A	225	0.00	0.00	0.00
Lee Energy Complex CC 1B	227	0.00	0.00	0.00
Lee Energy Complex CC 1C	228	0.00	0.00	0.00
Lee Energy Complex CC ST1	379	0.00	0.00	0.00
Mayo Steam 1	746	46.00	0.00	46.00
Richmond County CT 1	189	0.00	0.00	0.00
Richmond County CT 2	187	0.00	0.00	0.00
Richmond County CT 3	185	0.00	0.00	0.00
Richmond County CT 4	186	0.00	23.15	23.15
Richmond County CT 6	187	360.00	0.00	360.00
Richmond County CC 7	194	0.00	17.10	17.10
Richmond County CC 8	194	0.00	2.68	2.68
Richmond County CC ST4	182	0.00	6.15	6.15
Richmond County CC 9	216	0.00	0.00	0.00
Richmond County CC 10	216	0.00	0.00	0.00
Richmond County CC ST5	248	0.00	35.28	35.28

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
August 2019

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	59.70	0.00	59.70
Roxboro Steam 2	673	0.00	0.00	0.00
Roxboro Steam 3	698	0.00	0.00	0.00
Roxboro Steam 4	711	0.00	0.00	0.00
Sutton Energy Complex CC 1A	224	0.00	0.00	0.00
Sutton Energy Complex CC 1B	224	0.00	0.00	0.00
Sutton Energy Complex CC ST1	271	0.00	0.00	0.00
Wayne County CT 10	192	0.00	0.00	0.00
Wayne County CT 11	192	0.00	0.00	0.00
Wayne County CT 12	193	184.23	0.00	184.23
Wayne County CT 13	191	185.00	0.00	185.00
Wayne County CT 14	195	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.